

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A three-dimensional image display device, comprising:
a display panel displaying at least one parallax image; and
a mask formed of transparent regions and convertible regions alternately aligned along a horizontal direction, and formed in front of the display panel[.].

wherein a portion of the convertible regions having no parallax image becomes transparent and a portion of the convertible regions having parallax images becomes opaque, and

wherein the length for a segment of the transparent region is $p(D-d)/D$ and the length for a segment of the convertible region is $(n-1)p(D-d)/D$ where n is the number of parallax images, p is a pixel dimension, D is the distance from a viewer to the mask, and d is the distance from the mask to the display panel.

2. (Original) The device according to claim 1, wherein the mask is formed of a liquid crystal display panel.

3. (Original) The device according to claim 2, wherein the liquid crystal display panel is formed of liquid crystal display segments forming the transparent regions and the convertible regions.

4. (Original) The device according to claim 1, wherein the transparent regions of the mask are not aligned along a perpendicular direction.

5. (Currently Amended) The device according to claim 4, wherein a left side of an upper transparent region and a right side of an adjacently lower transparent region are [[is]] aligned ~~with a right side of a lower transparent region adjacent thereto.~~

6. (Original) The device according to claim 4, wherein a right side of an upper transparent region is aligned with a left side of a lower transparent region adjacent thereto.

7. (Original) The device according to claim 1, wherein a size of the transparent regions of the mask is equal to or less than 1/3 of a size of a pixel in the display panel.

8. (Original) The device according to claim 1, further comprising a controller converting a portion or all of the convertible regions into transparent regions depending upon a number of parallax images.

9. (Original) The device according to claim 8, wherein the controller converts all of the convertible regions into transparent regions, when the number of parallax images is 1 or 0.

10. (Currently Amended) The device according to claim [[1]] 8, wherein the controller converts a portion of the convertible regions into transparent regions, when the number of parallax images is less than a predetermined number of the parallax images.

11. (Currently Amended) The device according to claim [[1]] 8, wherein the controller controls a distance between the display panel and the mask depending upon a distance between a viewer and the mask.

12. (Currently Amended) A three-dimensional image display device, comprising:
a display panel simultaneously displaying a plurality of parallax images;
a mask formed of transparent regions and convertible regions alternatively aligned along a horizontal direction, and formed in front of the display panel; and
~~a mask provided in front of the display panel, and selectively having a portion of the mask become transparent; and~~
a controller determining transparent regions and opaque regions of the mask depending upon a number of the parallax images[[.]],
wherein a portion of the convertible regions having no parallax image becomes transparent and a portion of the convertible regions having parallax image becomes opaque, and

wherein the length for a segment of the transparent region is $p(D-d)/D$ and the length for a segment of the convertible region is $(n-1)p(D-d)/D$ where n is the number of parallax images, p is a pixel dimension, D is the distance from a viewer to the mask, and d is the distance from the mask to the display panel.

13. (Original) The device according to claim 12, wherein the controller controls a distance between the display panel and the mask depending upon a location of a viewer.

14. (Currently Amended) The device according to claim 12, wherein the controller increases a number of ~~the transparent regions and a number of the opaque regions when the number of~~ parallax images is ~~small~~ when the number of parallax images is less than a predetermined number, and reduces the number of the transparent regions and the number of the opaque regions when the number of parallax images is ~~large~~ greater than the predetermined number of parallax images.

15. (Currently Amended) The device according to claim 12, wherein the controller reduces a size of the opaque regions when the number of parallax images is ~~small~~ less than a predetermined number of parallax images, and increases the size of the opaque regions when the number of parallax images is ~~large~~ greater than the predetermined number of the parallax images.

16. (Original) The device according to claim 12, wherein the controller determines the size of the opaque regions to be larger than that of the transparent regions.

17. (Currently Amended) The device according to claim 12, wherein the controller detects a portion of the convertible regions ~~of the parallax images~~ having no parallax image.

18. (Currently Amended) The device according to claim 12, wherein the controller determines a portion of the mask ~~corresponding to the portion of the parallax images~~ having no parallax image of the convertible regions to become transparent regions.

19. (Currently Amended) The device according to claim 12, wherein ~~the controller~~
~~alternately aligns~~ the transparent regions and the opaque regions within the mask are aligned
alternately along a horizontal direction, and the upper and lower transparent regions are ~~does not~~
aligned ~~the transparent regions~~ along a vertical direction.